AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A mold assembly for a molding process comprising:

a mold member; and

an anisotropic diffuser member, said diffuser member comprising a fibrous composite having a plurality of discontinuous fibers each having a respective length, said fibers arranged in a lay-up with said length of each fiber being discontinuously arranged in a lay-up plane to achieve ~~in~~ a substantially uniform ~~direction~~ heat transfer within said diffuser member, wherein said diffuser member is arranged in a position permitting a rapid transfer of heat along said length of each fiber within say lay-up plane to said mold member.

2. (ORIGINAL) The mold assembly for a molding process according to claim 1, wherein said fibrous composite is a graphite reinforced composite.

3. (ORIGINAL) The mold assembly for a molding process according to claim 1, wherein said diffuser member is a diffuser plate.

4. (ORIGINAL) The mold assembly for a molding process according to claim 1, wherein said diffuser member is a thermal coating.

5. (ORIGINAL) The mold assembly for a molding process according to claim 1, wherein said mold member includes a mold cavity, said diffuser member being arranged within said mold cavity.

6. (ORIGINAL) The mold assembly for a molding process according to claim 1, wherein said mold member includes a mold cavity, said diffuser member being arranged alongside said mold cavity.

7. (ORIGINAL) The mold assembly for a molding process according to claim 1, further comprising a heating member.

8. (CURRENTLY AMENDED) An anisotropic diffuser plate for a mold assembly, said diffuser plate comprising a fibrous composite having a plurality of discontinuous fibers each having a respective length, said fibers arranged in a lay-up with said length of each fiber being discontinuously arranged in a lay-up plane to achieve ~~in~~ a substantially uniform ~~direction~~ heat transfer within

said diffuser member, wherein said diffuser member ~~is arranged in a position permitting~~ permits a rapid transfer of heat along said length of each fiber within said lay-up plane.

9. (ORIGINAL) The diffuser plate according to claim 8, wherein said fibrous composite is a graphite reinforced composite.

10. (CURRENTLY AMENDED) A method of controlling process temperatures in a molding apparatus, said method comprising the steps of:

controlling a temperature of a mold member with a heat source; and

arranging an anisotropic diffuser member along a surface of said mold member for distributing heat uniformly from said heat source ~~along a length of~~ through said anisotropic diffuser member, wherein said diffuser member includes a fibrous reinforced composite having a plurality of discontinuous fibers each having a respective length, said fibers being arranged in a lay-up with said length of each fiber being discontinuously arranged to achieve a substantially uniform distribution of heat within said diffuser member.

11. (CANCELLED)

12. (ORIGINAL) The method of controlling process temperatures in a molding apparatus according to claim 11, wherein said fibrous composite is a graphite reinforced composite.

13. (ORIGINAL) The method of controlling process temperatures in a molding apparatus according to claim 11, wherein said diffuser member is arranged in a position along an interior surface of a mold cavity of said molding member.

14. (ORIGINAL) The method of controlling process temperatures in a molding apparatus according to claim 11, wherein said diffuser member is arranged in a position along an exterior surface of a mold cavity of said molding member.

15. (NEW) A mold assembly for a molding process comprising:

a mold member; and

an anisotropic diffuser member, said diffuser member comprising a fibrous composite having a plurality of discontinuous fibers each having a respective length, said fibers being arranged in a lay-up having a plurality of

layers of said discontinuous fibers with said length of each fiber being discontinuously arranged to achieve a substantially uniform heat transfer within said diffuser member, and wherein said fibers within each layer of said plurality of layers are co-planar with adjacent fibers within the same layer.